July 2, 2014

R307. Environmental Quality, Air Quality.
R307-344. Paper, Film, and Foil Coatings.
R307-344-1. Purpose.

The purpose of this rule is to limit volatile organic compound (VOC) emissions from roll, knife, and rotogravure coaters and drying ovens of paper, film, and foil coating operations.

R307-344-2. Applicability.

[~~(1)~~]R307-344 applies to sources located in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah and Weber counties that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.

[~~(2) In Box Elder and Tooele counties, R307-344 applies to the following sources:~~

~~(a) Existing sources as of February 1, 2013, with the potential to emit 5 tons per year or more of VOC, including related cleaning activities; and~~

~~(b) New sources as of February 1, 2013, that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.~~]

R307-344-3. Definitions.

The following additional definitions apply to R307-344:

"Coating" means a protective, functional, or decorative film applied in a thin layer to a surface. This term often applies to paints such as lacquers or enamels. It is also used to refer to films applied to paper, plastics, or foil.

"Foil coating" means a coating applied in a web coating process on any foil substrate other than paper or fabric, including, but not limited to, typewriter ribbons, photographic film, magnetic tape, and metal foil gift wrap, but excluding coatings applied to packaging used exclusively for food and health care products for human and animal consumption.

"Knife coating" means the application of a coating material to a substrate by means of drawing the substrate beneath a blade that spreads the coating evenly over the width of the substrate.

"Paper coating" means uniform distribution of coatings put on paper, film, foils and pressure sensitive tapes regardless of substrate. Related web coating processes on plastic film and decorative coatings on metal foil are included in this definition. Paper coating covers saturation operations as well as coating operations.

"Roll coating" means the application of a coating material to a substrate by means of hard rubber or steel rolls.

"Roll printing" means the application of words, designs and pictures to a substrate usually by means of a series of hard rubber or steel rolls each with only partial coverage.

"Rotogravure coating" means the application of a uniform layer of material across the entire width of the web to substrate by means of a roll coating technique in which the pattern to be applied is etched on the coating roll. The coating material is picked up in these recessed areas and is transferred to the substrate.

"Saturation" means dipping the web into a bath.

"Web" means a continuous sheet of substrate.

R307-344-4. [~~Emission Standards~~]VOC Content Limits.

Each owner or operator shall not apply coatings with a VOC content in excess of the amounts specified in Table 1 or shall use an add-on control device as specified in R307-344-6.

TABLE 1

Paper, Film, and Foil Coating Limitations
(values in pounds VOC per pound of coating, minus water and exempt solvents (compounds not classified as VOC), as applied)

COATING CATEGORY	VOC EMISSION RATES
Paper, film and foil	0.08
Pressure sensitive tape and label	0.067

R307-344-5. Work Practices and Recordkeeping.

(1) Control techniques and work practices are to be implemented at all times to reduce VOC emissions [~~from fugitive type sources~~]. Control techniques and work practices include:

(a) Using tight fitting covers for open tanks;

(b) Using covered containers for solvent wiping cloths;

(c) Using collection hoods for areas where solvent is used for cleanup;

(d) Minimizing spills of VOC-containing cleaning materials;

(e) Conveying VOC-containing materials from one location to another in closed containers or pipes;

(f) Cleaning spray guns in enclosed systems; and

(g) Using recycled solvents for cleaning.

(2) All sources subject to R307-344 shall maintain records demonstrating compliance with [~~all provisions of~~]R307-344-4 and R307-344-5[~~ on an annual basis~~].

(a) Records shall include, but not limited to, inventory and product data sheets of all coatings and solvents subject to R307-344.

(b) These records shall be available to the director upon request.

(3) No person shall apply coatings unless these materials are applied with equipment operated according to the manufacturer's specifications, and by the use of one of the following methods:

(a) Flow coater;

(b) Roll coater;

(c) Dip coater;

(d) Foam coater;

(e) Die coater;

(f) Hand application methods;

(g) High-volume, low pressure (HVLP) spray; or

(h) Other application method capable of achieving at least 65% transfer efficiency, as certified by the manufacturer.

(4) All persons shall perform solvent cleaning operations with

cleaning materials having VOC content of 0.21 pounds per gallon or less.

R307-344-6. [~~Optional~~]Add-On Control[~~s~~] Systems Operations.

[~~(1) The owner or operator may install and maintain an incinerator, carbon adsorption, or any other add-on emission control device, provided that the emission control device will attain at least 90% efficiency performance.~~

~~(2) The owner or operator of a control device shall provide documentation that the emission control system will attain the requirements of R307-344-6.~~

~~(3) Emission control systems shall be operated and maintained in accordance with the manufacturer recommendations. The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.~~]

(1) The owner or operator shall install and maintain an incinerator, carbon adsorption, or any other add-on emission control system, provided that the emission control system is operated and maintained in accordance with the manufacturer recommendations in order to maintain at least 90% capture and control efficiency. Determination of overall capture and control efficiency shall be determined using EPA approved methods, as follows.

(a) The capture efficiency of a VOC emission control system's VOC collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR Part 51, Appendix M, Methods 204-204F, as applicable.

(b) The control efficiency of a VOC emission control system's VOC control device shall be determined using test methods in Appendices A-1, A-6, and A-7 to 40 CFR Part 60, for measuring flow rates, total gaseous organic concentrations, or emissions of exempt compounds, as applicable.

(c) An alternative test method may be substituted for the preceding test methods after review and approval by the EPA Administrator.

(2) The owner or operator of a control system shall provide documentation that the emission control system will attain the requirements of R307-344-6(1).

(3) The owner or operator shall maintain records of key system parameters necessary to ensure compliance with R307-344-6. Key system parameters may include, but are not limited to, temperature, pressure and flow rates. Operator inspection schedule, monitoring, recordkeeping, and key parameters shall be in accordance with the manufacturer's recommendations, and as required to demonstrate operations are providing continuous emission reduction from the source during all periods that the operations cause emissions from the source.

(4) The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.

[~~R307-344-7. Compliance Schedule.~~

~~(1) All sources in Davis and Salt Lake counties are subject to this rule upon the effective date.~~

~~(2) Sources in Box Elder, Cache, Tooele, Utah and Weber counties shall be in compliance with the rule by January 1, 2014.~~]

KEY: VOC emission, paper coating, film coating, foil coating
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